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ABSTRACT

This paper presents first-year results of an evaluation of a Children's Scholarship Fund (CSF) program which provided scholarships enabling low-income families nationwide to send their K-8 children to private schools of their choice. Families won scholarships through a lottery. Telephone surveys of parents/caretakers of children who took advantage of the CSF scholarships were conducted at the end of the first school year in which the scholarships were used. The survey examined level of satisfaction with the school, reasons for choosing the school, experiences with the school, and family background. Families of students not offered the scholarship were also surveyed. Private school parents were more satisfied with the quality, environment, and location of the school than were public school parents. Discipline problems, including fighting, gangs, racial conflict, and drugs, were less common within the private schools. Private schools generally had fewer facilities and programs and were smaller than public schools. Private school parents felt that teachers were more respectful towards them and their children. Public schools had higher populations of minority students. Both public and private school parents had similar levels of participation in school activities and conferencing with teachers. Families offered scholarships were more likely to report that academic quality and religious considerations were the most important reason for choosing the school. (SM)

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Education Policy and Governance

An Evaluation of the Children's Scholarship Fund

Paul E. Peterson and David E. Campbell

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An Evaluation of the Children's Scholarship Fund

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An Evaluation of the Children's Scholarship Fund

(Executive Summary)

In 1999, the Children's Scholarship Fund (CSF) announced that it would award scholarships enabling low-income families across the United States to send their children in grades K-8 to the private school of their choice. The families of over 1.25 million children applied for scholarships; 40,000 were awarded. Because more families applied than could receive scholarships, recipients were chosen by lottery, enabling the research methodology of a randomized field trial to evaluate the program.

The power of random assignment combined with the size and national scope of the CSF offers researchers an unmatched look at the effects of attending private schools on both parents and students. This evaluation reports on the results of a telephone survey administered to applicants at the conclusion of the first school year in which CSF scholarships were used. Over 2,300 applicants and 850 children in applicant families in grades 4 through 8 were surveyed. Questions were asked on a variety of subjects, including the level of satisfaction with the school, reasons for choosing a school, experiences within the school, and family background characteristics.

Tables 2-20 display comparisons between families who, upon receipt of a scholarship, opted to have their children attend a private school, and families whose children remained in public schools. In each of these tables, column 1 contains the results for parents whose children attended a private school in the previous year or for the private school students themselves; column 2 displays the results for public school parents and students. The third column reports the difference between columns 1 and 2, which tells us the impact of switching from a public to a private school.

Because scholarships were awarded by lottery, on average there are no demographic differences between families who were offered scholarships and families that were not. Table 21, however, presents the demographic characteristics of families who were offered a scholarship and made use of it ("takers") and those who were offered one but did not use it ("decliners").

Tables 22 and 23 compare families who were *offered* a scholarship and those who were not. In Table 22, therefore, we examine the effect of the *CSF program* (not of attending a private school) on the reasons people choose the schools they do. Similarly, in Table 23 we report the effect of the CSF on whether students are attending the school their parents prefer. The final two tables (Tables 24 and 25) are restricted to scholarship takers only because they deal with characteristics of private schools (religious affiliation and tuition respectively).

All differences discussed in the text are statistically significant at conventional levels unless otherwise noted.

The main findings are as follows:

- Parents whose children are in private schools are more likely to award their school an "A" grade than public school parents—72% versus 16%. The average private school grade is an A-, while on average the public schools only score an average of C+. Private school students are also more likely to give their school an "A," although the difference is not statistically significant. Paradoxically, fewer private school students report that they "like school a lot," although again the difference between private and public school students is not statistically significant.

- Private school parents are more likely to report that they are "very satisfied" with their schools' academic quality, safety, discipline, and the values taught in the school. For example, 68% of parents whose children are in private schools are "very satisfied" with the academic quality of their school, compared to 23% of public school parents. More private school parents are also "very proud" of their child's school. Among youth, more private school students report that "students are proud" to attend their school, although the difference—55% versus 35%—is not statistically significant.

- Discipline problems are less common in private than public schools, at least as reported by parents. Fewer private school parents rate fighting, cheating, stealing, gangs, racial conflict, guns, and drugs as serious problems in their schools. While almost half of public school parents report fighting to be a problem in their child's school, none of the private school parents did. Fewer private school students report that disruptions in school are common—only 7.8%, contrasted with 56.8% of public school students.

- Generally, private schools have fewer facilities and programs than public schools. For example, while 89% of public schools have a nurse's office, only two-thirds of private schools do. Two exceptions stand out, however: private schools are more likely to have individual tutors and an after-school program, although only the former difference is statistically significant. When comparing parents of children with learning disabilities, private school parents are also more likely to report that their school attends to their child's needs "very well" (this difference of 43 percentage points is large but due to the small numbers involved is not statistically significant).

- Private schools are smaller than public schools, as are their class sizes. While the average (approximate) size of private schools is 230 students, public schools are over twice as large, with more than 500 students. Similarly, public school classrooms average 24 students, while private schools have an average class size of 20 students.

- Private school parents are more likely to report that teachers "always" show them respect. Private school students are less likely to report that the rules for behavior in their school are strict. Only 15% of students in private schools hold this opinion, compared to 93% of their public school counterparts. Similarly, students in private schools report far (but not significantly) less frequently that their teachers put them down.

- More private school students attend a school that has a student population that, according to parents, is composed of less than 10% minority students. More public

school students attend schools that are over 90% minority. Among students, there were negligible differences between public and private school attendees in behavioral measures of racial integration—whether they eat lunch or are friends with youth of different races. When these same comparisons are made for African-Americans only, fewer private school students attended a school that has a student body that is over 90% minority. More African-American private school students attend schools that range from "less than 10%" to "50% to 90%" minority. None of these differences for African-Americans only, however, are statistically significant. More Black students in private schools report eating lunch with students of other races. They also have more friends who are of a different race. Again, these differences are not statistically significant.

- While private school parents and students report that their schools assign slightly more homework than do public schools, the differences do not achieve statistical significance.

- Public and private school parents display essentially no differences in the number of parent-teacher conferences attended, the frequency of volunteering in the school, and communication with other parents whose children attend the same school. Private school parents report a higher frequency of communicating with teachers by telephone. Private school students are more likely to report that their parents are well informed about their schools, but slightly less likely to report that they talk to their parents about school regularly (differences not significant). Private and public school parents are equally likely to know their children's friends.

- A slightly smaller percentage of private school parents choose the statement "a school works better when a family pays tuition" over "a school works better when all the costs are paid for by taxes." The difference is not statistically significant.

- Although more private school students will enroll in the same school next year (82% to 72%), this difference is not statistically significant. The difference between the public and private sectors is largely explained by the fact that when asked why their child will not return to the same school, more public school parents report that this is because she is graduating from her school. This is almost certainly due to the fact that middle schools are much less common in the private than in the public sector. Roughly 5% of private school parents report that their child will not re-enroll because their child's school is too expensive, compared to essentially no public school parents (a difference that is statistically significant). A handful of public school students were asked not to return; no private school students were asked to find another school. There are no significant differences in the suspension rates of private and public school students.

- Private school parents are more likely to report satisfaction with the location of their child's school. There is essentially no difference in the length of time taken by private and public school students to get to school.

- While more private school students report that they expect to continue their education beyond college, the 16 percentage-point difference is not statistically significant.

- There are no meaningful differences in the reported relations between peers in public and private schools. Private and public school students are equally likely to report that students get along with each other and that other students make fun of them.

- Private school students attend religious services slightly more often, but participate in religious youth groups slightly less often. They are also less likely to participate in scouting or play team sports. None of these differences, however, reach statistical significance.

- There are no differences between public and private school students in their levels of political tolerance or political knowledge.

- The demographic characteristics of those who used the scholarship offered them ("takers") with those who did not ("decliners") differ in some but not all respects. An equal percentage of taker and decliner children have learning disabilities (13%). Mothers of students who used the scholarships are more likely to have a college degree and less likely to work full time. They also attend religious services more frequently. They are more likely to have lived in their current residence for two or more years. More of them are white; thus fewer are African-American and Hispanic. A greater percentage are Catholic. The household income of taker families is slightly higher than decliners. (All of these differences are statistically significant.) Mothers of taker and decliner students are equally likely to be "born-again" Christians. They are also the same average age. The percentage of two-parent households is the same across the two groups.

Tables 22 and 23 compare the effect of receiving the *offer* of a scholarship, rather than the effect of switching from public to private schools.

- Parents offered a scholarship were more likely to report that academic quality and religious considerations were the most important reason for choosing their school. They were also less likely to report that location was the most important criterion, and fewer of them said that their child's school was the "only choice" available.

- 72% of parents offered a scholarship gained admission to their preferred school, contrasted with 61% of those who were not offered a scholarship. A smaller percentage of parents who received an offer reported that they could not afford the cost of their preferred school, although the difference between those who did and did not receive an offer was only 4%. Fewer parents who received an offer said that there was no space available at their preferred school.

Tables 24 and 25 include scholarship takers only.

- A majority—53%—of students using CSF scholarships attended Catholic schools. The second most common type of school was a non-denominational Christian school (20%). 8% of CSF users attended a school that is not religious in character. The remainder attended schools sponsored by various faiths, including Baptist, Lutheran, and Jewish.

- 40% of CSF takers pay between $1,000 and $2,000 in tuition, with 26% spending $500 to $1,000 and 25% between $2,000 and $4,000. In total, 69% spend less than $2,000, and 94% spend less than $4,000.

AN EVALUATION OF THE CHILDREN'S SCHOLARSHIP FUND

Paul E. Peterson and David E. Campbell

The mission of the Children's Scholarship Fund (CSF) is "to maximize educational opportunity . . . by offering tuition assistance for needy families."* To that end, in 1999 CSF announced that it would award scholarships enabling low-income families across the United States to send their children in grades K-8 to the private school of their choice. The families of over 1.25 million children applied for scholarships; 40,000 were awarded. Because more families applied than could receive scholarships, recipients were chosen by lottery, enabling the research methodology of a randomized field trial to evaluate the program.

The power of random assignment combined with the size and national scope of CSF offer researchers an unparalleled look at the effects of attending private schools on students' experiences, as they and their parents perceive them. The study builds on previous reports issued by Harvard University's Program on Education Policy and Governance (PEPG), which used a similar methodology to evaluate CSF-related

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programs in three cities—the School Choice Scholarships Foundation program in New York City, the Washington Scholarship Fund program in Washington, D.C., and Parents Advancing Choice in Education in Dayton. Ohio.[1] Now, it is possible to see whether the impacts of the CSF-related programs observed in these three cities are duplicated in the CSF program established for low-income families nationwide. For the most part, the answer is yes; the results reported below resemble those observed in the earlier studies of the CSF-related programs in New York City, Washington, D. C. and Dayton.

This national CSF evaluation is more limited than PEPG's evaluations of the CSF-related programs in these three cities, however. In the three cities we were able to both interview families and administer tests of reading and math achievement. In this national study it was not possible to obtain test-score data.[2] But we can ascertain whether nationwide parental and student assessments resemble those in the three cities. To the extent that they do, some readers may conclude that test-score results from the three cities have nationwide implications. However, we cannot provide direct evidence on this point.

The report proceeds as follows. First, we briefly review the results from the evaluations of the CSF programs in New York, Washington, D. C. and Dayton. Next, we describe the design of the national CSF program as well as the methodology we use to evaluate the program. We then report the effects of participating in the CSF program on both parents and students. In addition to the quantitative results, we also include quotations from focus groups discussions that have been held with CSF applicants. Their words provide illuminating details of *how* a program like CSF affects the educational opportunities and experiences of its participants. Finally, we provide data on the kinds of

families who chose to use a scholarship, the criteria parents used when choosing schools, and the types of schools CSF recipients have chosen to attend.

Previous Findings

After one-year of participation in the CSF programs in New York City, Washington, D.C., and Dayton, Ohio the average overall test score performance for African-American students who switched from public to private schools was 3.3 National Percentile Ranking points higher than the performance of those who remained in public schools.[3] After two years, their performance was 6.3 points higher. No gains or losses were found for students of other racial and/or ethnic groups (see Table 1). These results are consistent with another evaluation of a CSF-funded scholarship program in Charlotte, North Carolina, where after one year students who switched from public to private schools in the predominantly African-American population showed a gain of 6 percentile points.[4]

A difference of 6.3 points is moderately large, especially when it takes place over a short two-year time period. Private-schooling is not a magic bullet that transforms students over night. Elementary and secondary education is a long, painstaking process to which most people devote 13 years of their life. To get a sense of the magnitude of a 6.3 point difference in test scores, consider the much-discussed gap in test scores of blacks and whites. On average, past research has shown this gap to consist of approximately one standard deviation—a statistical term indicating that black students scoring in the upper third of their ethnic group perform at the same level as the average white student.[5] If this gap could be eliminated, it has been shown, average black earnings would increase to

approximately 90 percent of white earnings. For this reason, many people feel that closure of the test-score gap is one of the most important civil-rights objectives remaining.

The 6.3 point gain in test scores for African-Americans after two years equals about one-third of a standard deviation, or one-third of the test-score gap. If the remaining two-thirds could be closed in subsequent years of elementary and secondary schooling, the social impact would be of great significance.

Another way of thinking about the observed impact of the CSF programs is to consider the recent evaluation of a class size reduction in Tennessee from 24 to 16 students, an intervention which if implemented nationwide would increase the cost of schooling by approximately 33 percent. African-American students in smaller classes gained 4.9 NPR points, or nearly as much as was obtained from the CSF scholarship programs, suggesting that such a policy would also reduce the test-score gap.[6] However, the benefit-cost ratio for the CSF intervention was much larger than the Tennessee class-size intervention, which would cost hundreds of billions of dollars to introduce nationally.

As another point of comparison, the RAND study of *Improving School Achievement* reports what are said to be "remarkable" one-year gains in some states that have rigorous statewide testing programs (e.g., Texas and North Carolina) that are "as much as 0.06 to 0.07 standard deviation[s] per year," or 0.12 to 0.14 standard deviations over two years. Some have disputed this finding, but should it be correct the gain would indeed be remarkable, as testing programs do not involve major new expenditures in the same way the class-size reductions do. However, the impact of the CSF scholarship

programs on the test scores of African-American students was over twice as large as those the RAND study reports.

Not only did the CSF scholarship program enhance the test-score performance of African-American students in New York, D. C., and Dayton, but both parents and students report that their school experiences were greatly improved in other ways as well. Parents whose children have moved from public to private schools report much higher levels of satisfaction than parents whose children remained in public schools. This includes measures of overall satisfaction (like the grade given to the school), as well as more specific items that inquire about school safety, discipline, academic rigor, the values taught by the school, and location. Also, parents of students in private schools are less likely than public-school parents to report that an array of problems are "serious" at their child's school, including fighting, cheating, and stealing. And according to parental estimates, private schools also have smaller student populations and smaller class sizes. They also assign more homework than public schools. Public schools, however, generally have more facilities and programs than schools in the private sector.

In these three cities, parents most frequently identified academic quality as the primary reason for choosing a particular school for their child. Other considerations were important for some, including the religious instruction offered by a school and whether the school seems safe, but none is cited as consistently as academic quality.

At the time that the lottery was held, students who used the scholarship did not score higher on standardized tests than students who did make use of the scholarship. The one exception to this pattern was older students (entering grades 6 through 8) in the District of Columbia; scholarship students had higher scores than those who declined the

scholarship. Families who made use of scholarships in these three cities were only modestly more advantaged than those who decline a scholarship when it is offered. Their incomes were generally a little higher (except in Dayton, where they were a little lower). The percentage of mothers with a college education was also a little higher, and scholarship families were less likely to be welfare dependent.

CSF Program Details

The eligibility for CSF scholarships is straightforward. First, applicant families had to have at least one child in grades K-8 (although because of the difficulty in comparing kindergarten to grade school, our evaluation only includes families with children in grades 1-8). Second, families had to be of low to moderate income. The scholarship amounts were determined on a sliding income scale—the lower a family's income, the higher the amount of the scholarship. For example, a family of four with a household income of $16,450 (the federally-determined poverty line) could receive a scholarship covering up to 75% tuition at the private school of their choice. With an income of $44,415 (270% of the poverty line), that same family would receive a scholarship to cover 25% of tuition. An income of $30,433 would allow the family to receive 50% of tuition. If a family won the lottery, all of their children were awarded a scholarship. Scholarships were awarded in April 1999, to be used for the upcoming school year. Our survey was administered in June-August 2000, at the conclusion of that first school year.

Research Design

While there have been other evaluations of scholarship programs, these have been restricted to individual cities. In each case, an open question remains whether the findings are idiosyncratic to those particular communities. CSF is the first *national* scholarship program; the findings reported here are not an artifact of the educational context of a given city and may be presumed to have national implications.[7]

Data Collection

A sample of all families who applied for a CSF scholarship was surveyed in the summer of 2000 by telephone. Those surveyed included both those families offered a scholarship and those who were not. In other words, the evaluation took the form of a randomized field trial, with one group, called the "treatment group," receiving a scholarship offer, while the other group, the "control group," was not offered a scholarship. Since the two groups were created by a random process, they can be expected to be similar, on average, in all respects except for the offer of the scholarship.[8]

Applicants were surveyed at the conclusion of the first school year in which recipients were able to use their scholarships. The sample was randomly drawn from the master list of CSF applicants.[9] In addition to interviews with parents, students in grades 4 through 8 were also interviewed (with their parents' permission). A total of 2,368 adults participated in the survey: 464 who were offered and used a scholarship, 1,116 who were offered and declined a scholarship, and 788 who were not offered a scholarship. Eight hundred and seventy-two children were surveyed: 177 whose families were offered and used a scholarship, 411 whose families were offered and declined a scholarship, and 282 whose families were not offered a scholarship.

The parent survey was administered to "the parent or caretaker" of the child or children in the home. The response rate to the telephone survey was 46 percent, comparable to response rates of other national telephone surveys and relatively high for a low-income (and thus transient) population like the one being evaluated here. Response rates were almost identical for treatment and control groups.[10] Despite random assignment to the treatment and control groups and the similar response rates from the two groups, there are small differences in the racial composition, education levels, and religious affiliation of the two groups. All results are weighted to adjust for differences in the demographic characteristics of the two groups.[11] Because these differences were small, the weights have only a minimal effect on the results.

To facilitate comparisons, parents were asked about the experiences of only one of their children in grades 1-8. If the family had more than one child in this age cohort, they were asked to report on the child who was next to have a birthday (a technique that maintains randomization and comparability). The next-birthday children were also the ones interviewed, if they were in grades 4 through 8.

Parents were asked a variety of questions about their level of satisfaction with their child's school, the experiences their child had at school, and the experiences the parent had with the school's administrators and teachers. Other questions inquired about school facilities, plans for the following year, and the reasons for any changes in school attendance plans. Parents were also asked about their involvement with their child's school and their interaction with other parents whose children attend the school. In a shorter survey, students were asked some questions resembling those asked of parents. In addition, students were asked about their educational expectations, peer group relations,

and extra-curricular activities. Finally, students were also asked a battery of questions designed to gauge their training as citizens, including inquiries into the extent of their political knowledge and tolerance.

Data Analysis

If everyone who was offered a scholarship used it, our analysis could simply compare those who were offered one with those who were not. However, only 29 percent of the lottery winners used the scholarship. This complicates our evaluation. If we were to simply compare these two groups, we would be comparing a "treatment" group in which 71 percent of the membership had not been "treated," producing misleading results. However, we cannot simply compare those who actually used the scholarship with the control group, who shall be called the "takers", because the takers differed from the decliners in important respects.

This type of problem is not unique to evaluations of scholarship programs. Medical researchers evaluating a new drug have the same type of concern, namely how to deal with the fact that not everyone who is offered a medication in a drug trial will take it as prescribed—or take it at all. To solve the problem, we thus followed the same procedure used by medical researchers, an instrumental variable analysis that obtains unbiased estimates by employing a two-stage regression model. In the first stage of the model, we predicted the probability with which the student attends a private school based upon whether or not she was offered a voucher. With these predicted values included in the second-stage equation, one can recover unbiased estimates of the impact of switching from a public to a private school.[12] While this two-stage technique was first used in

medical research, whenever possible, it has become standard practice in econometric studies of social interventions.[13]

Some effects that we report are quite large but not statistically significant. When only 29 percent of the families use a scholarship, the research technique employed here, even though it provides unbiased estimates, cannot ascertain whether they might have occurred by chance unless the sample size is considerable and/or the effects are substantively large. In the case of student reports many large effects are not statistically significant because we have many fewer students than parents participating in the survey. (As mentioned above, children in grades 1 to 3 were not surveyed.)

In addition to the statistical results reported for each item on the questionnaire, this report also incorporates verbatim comments made by parents who have applied for CSF scholarships.[14] The comments were made during separate, recorded focus-group conversations with three groups—families who were offered and used CSF scholarships, those who were offered and did not use a scholarship, and those who were not offered a scholarship. The focus-group sessions were conducted by PEPG senior staff members in Dayton, Ohio and Washington, D.C. at the same time students in these cities were being tested on their academic performance. From the assembled parents, roughly six to eight names were chosen randomly for participation in the focus groups, which lasted about a half-hour to forty-five minutes each. Parents were not required to participate, although most who were asked did so. Because anonymity was promised to those who took part, all identifying information—such as names of schools and children—have been removed from the statements quoted below. Otherwise, quotations are excerpted exactly as spoken, complete with their uneven syntax and vernacular prose.

The excerpts from the focus-group conversations serve a different purpose than the statistical results we report. They do not constitute a rigorous test of differences between the private and public school populations. But they do provide texture and detail that helps to illuminate the brief responses to questions posed in telephone surveys, bringing to life the consequences of having a child attend one type of school rather than another.

Impacts of CSF Program on Students and Families

The impact of the CSF program, as perceived by parents and students, is reported in tables 2–20. Column 1 contains the responses of the families whose child attended a private school in the previous year. Column 2 displays the results for the control group, the public school families who had applied for a scholarship but who did not win the lottery and whose children remained in public school. The third column reports the difference between columns 1 and 2, which tells us the impact of switching from a public to a private school. To obtain unbiased estimates of this impact, the results were generated using two-stage regression models described above.

Parental and Student Satisfaction

Many economists think that customer satisfaction is the best measure of the quality of any product, public and private schools included. Jay Greene has written that if education policy

> were almost any other policy realm or consumer issue we might consider the strong positive effect of school choice on parental satisfaction sufficient evidence to conclude that the program is beneficial to its participants. If, for example, people report that they are happier with the maintenance of public parks we would usually consider this as sufficient proof that efforts to improve the parks have

> succeeded. We would not normally feel obliged to count the number of items of trash and repair problems to verify reports of satisfaction.[15]

Most studies of scholarship programs for low-income minority families have found that families using scholarships are much more satisfied with their schooling than are families who remain in public schools.[16]

Just as students receive a grade at school, parents were asked to give their child's school a grade. As reported in Table 2, 72 percent of private school parents gave their child's school an A, compared to 16 percent of public school parents, an extraordinarily large difference of 55 percentage points. The average grade given by private school parents was an A-, compared to a C+ for parents of children who remained in public schools. Students were less generous, however. More private school than public school students gave their school an A (52 percent to 38 percent), but the difference is not statistically significant. The average grade for both groups was a B. Fewer private school students reported that they "like school a lot," though, again, the difference does not reach statistical significance.

Table 3 reports the percentage of parents who were "very satisfied" with four aspects of their child's school: academic quality, safety, discipline, and teaching values. In each case, more private school than public school parents reported a high level of satisfaction. For example, 68 percent of private school parents are very satisfied with the academic quality of the school their child attends, compared to 23 percent of public school parents. This finding was supported by focus-group conversations, where the academic rigor of private schools was often cited as a reason parents sought them out. In the words of one mother:

> My first daughter, she finished 6th grade in the public school, and I saw that she had a lot of potential and that she would be better off in a private school. This is her 2nd year in the private school and she is doing great. And they have a lot of classes and the academics are much, much better than the public system and they have more opportunity to go to college and more expectations for their future.[17]

When parents were asked about their satisfaction with safety at school, a similar 51 percentage point gap between private and public school parents appeared—71percent and 20 percent for the two groups, respectively. Questions that probed satisfaction with discipline and teaching values generated similar patterns of response. Fifty-eight percent of the private school parents were very satisfied with the discipline, and 69 percent were similarly satisfied with the teaching of values. For public-school parents, only 22 percent and 25 percent expressed similar levels of satisfaction with these two aspects of their child's school, respectively. These issues were often raised by parents in focus-group discussions. Take, for example, the words of a mother who had applied for a CSF scholarship but had not received one. In describing her child's public school, she said:

> [A] big problem at the school that my kids are in is discipline. With too many kids comes a lot of problems with discipline which all falls back to classroom size. My son came in late one day. I took him to school. He come in late. The teacher was trying to teach. I was speaking to the assistant. Just about the number of people that are here, the kids stood up and congregated over to the coat room behind my son...and I'm like, what is going on? Is he...is this a game? You know...what's going on? And I questioned him about it after school, why was everyone coming? And he said that's just what they do. And I was like, there's no way any learning is going on, if the teacher is teaching and a whole group of people are leaving to go do whatever it is they want to do. That falls back into... policy, discipline policy with the school.[18]

Many parents also expressed dismay that public schools do not emphasize values. Typical are the comments of this mother:

> I feel that if they bring the prayer back in school and bring the religion back in then we won't have all his gun shooting that we have, stabbing going on, all this

> violence that we have going on among the students and teachers. If they bring it back everybody will learn values. I really do feel that.[19]

Some parents also make a link between values and discipline, as exemplified by this quotation from a focus group participant.

> [K]ids nowadays seem like they don't respect their teachers. They think that it is a joke all the time and they don't have a lot of discipline and with more discipline problems than there used to be when there was prayer in schools. I think that it would bring a lot of values back.[20]

In addition to inquiring about satisfaction levels, we asked parents whether they felt proud of their child's school. Seventy percent of private school parents reported that they felt "very proud," contrasted with 25 percent of public school parents. More private school students also reported "students are proud" to attend their school (55 percent versus 35 percent), but the difference was not statistically significant.

School Disruptions

In an effort to gauge the level of disruption students experience in private and public schools, parents were asked whether the following problems are "very serious", "somewhat serious", or "not serious" at their child's school: fighting, cheating, stealing, gangs, racial conflict, guns, and drugs.[21] Table 4 displays the percentage of parents reporting that each problem is either "very" or "somewhat" serious. Far fewer private school parents ranked each problem as serious, with only drugs failing to reach statistical significance (recall that the age range of students is grades 1-8; drugs are likely to be a more serious problem for older students). For example, while 47 percent of public school parents report that fighting is a problem, no private school parents do.[22]

Our focus group discussions underscored how parents see the disciplinary environment within private schools. Consider the words of this mother, describing her child's private school:

> It [discipline] is very strict. The children they know right off from the very beginning that if you do something inappropriate you are out. I mean out....they will put you out of the school. I don't know if cheating...it is a very serious offense, if you cheat on a test. Any type of vandalism is very serious....suspension, perhaps forever....you won't be allowed back. Fighting is just not allowed or any sassiness toward the teacher. It is just very strict so therefore....they don't have that problem, not never ever, but it is very strict. There is no uniform but there is a dress code. They allow your freedom of expression but there are certain things that you can not wear to school. So they do try to discipline how you carry yourself as growing adults.[23]

Even though this parent raises the possibility of expulsion as a disciplinary tool, we did not find a difference in the suspension or expulsion rates of private and public schools (see discussion below).

Another mother described the strict discipline within her son's private school, comparing it to the public school her other son attends:

> At [name of private school] it is the same thing. They don't tolerate disruptions in the class and he is only in kindergarten. He gets out of line in the kindergarten and they will call or they will send a note home and his types of notes is a sad face but the teacher will put an explanation, like I said for the kindergarten. I don't know how it is above, but they do not tolerate any disruptions any misbehaviors, they address it quickly. [Son's name], who is at [name of public school], they have graffiti on the walls, but I have not been called too much for things happening in his school, but I don't know how they discipline there but, there is graffiti and things on the walls. I think that whoever...should clean it up or something like that. So in that respect I don't think that discipline is as tight.[24]

When students were asked about their experience in school, a much higher percentage of public school students reported they "strongly agree" that "other students often disrupt class." As table 4 shows, 57 percent of public-school students reported that

disruption is common, contrasted with 8 percent of private- school students. This 49-point gap is statistically significant.

Along similar lines, more public than private school students "strongly agree" that they "do not feel safe at school," although the difference is not statistically significant. But while a greater proportion of private school parents report that cheating is not a problem in their children's schools, more private school students "strongly agree" that "some teachers ignore cheating when they see it." Again, however, the gap is not statistically significant. Private and public school students do not differ in the number of their friends they say "get in trouble with their teachers" (on average, both groups say one out of their four best friends does).

School Facilities

Nationwide, average private school tuition in 1993-94 was estimated at $3,116 with students at Catholic schools (the type of school in which most CSF users enroll) paying an average of $2,178. This is considerably less than public school expenditure per pupil, which was $7,305.[25] (Admittedly, tuition does not necessarily represent the full cost of educating a child, but it is the best approximation we have of per-pupil expenditures in private schools). Private-school teacher salaries in that year were less than $22,000, as compared to an average of over $34,000 in the public sector.[26] High-prestige private schools, often affiliated with mainline Protestant churches, are a rarity. Sidwell Friends and St. Albans in the District of Columbia are prominent in the public's mind, in part because President Clinton's daughter and Vice President Gore's children attended them. But these well-appointed schools are the exception, not the norm.

Consistent with this pattern, the higher levels of satisfaction with private schools does not appear to be due to the extensiveness of their programs and facilities. Parents were asked whether their child's school has a variety of material resources and programs: a nurse's office, a cafeteria, special programs for advanced learners, special programs for students with learning problems, a guidance counselor, a music program, individual tutors, and an after-school program. With only two exceptions—individual tutors and an after-school program—the public schools have superior facilities and programs. The differences for the presence of a nurse's office, a cafeteria, and special programs for students with learning problems all achieve statistical significance. The private school advantage regarding individual tutors is also statistically significant. These data suggest that if the programs available in the school are a factor affecting parental satisfaction, then individual tutors are a wise investment on the part of the school.

The lack of facilities in private schools was a common concern raised by parents. Consistent with our survey information, this mother said she had been dissatisfied with the discipline at the public school but disappointed in the facilities of her child's private school:

> [T]he public school was violent and the children were disruptive and stuff so I decided to put him into private school. The reason that I am not satisfied with the private school is because the school facilities. It is a very small school. . . .They don't have a gym, the don't have a cafeteria, they don't have a computer lab and things like that. If he is going to go to a school that I have to pay for I want him to have the best.[27]

Conversely, we found parents who were very satisfied with the programs offered by the public schools their children attend.

> They [child's public school] have special activities for the kids before and after school. They have computer labs. I truly love that school but, because we are out of boundary he will not be able to attend next year. And [child's name], he

> attends [name of a public school]. I am satisfied with that too. They have before and after programs for him especially with art. He is into art and the counselors and his art teacher and his regular teacher have recognized that and they have taken him to art museums presentations at the art museum. They do a lot with what he has interest in.[28]

Special Education

In the debate over school choice, one type of program—special education—has received a good deal of attention. Critics of school choice say that private schools ignore the needs of students with physical and mental disabilities. For example, Laura Rothstein says that "choice programs often operate in a way that is either directly or indirectly exclusionary" of those with disabilities.[29] Defenders of school choice often claim that many of those diagnosed as disabled can learn in regular classrooms and that special arrangements can be made for others. With such a large sample of parents, we are able to analyze a subset of 314 who indicated that their child has a learning disability, to determine whether private schools meet the needs of learning-disabled children. As displayed in the final row of Table 5, 73 percent of private school parents said that the school tends to the needs of their disabled child "very well," compared to 30% of public school parents. Because of the relatively low numbers involved in this analysis, this 43-point gap does not reach statistical significance. Thus, while the numbers suggest that, at least from the parents' perspective, private schools actually do a better job of helping disabled students learn, a more cautious interpretation is simply that they appear to do no worse.

Comments made in our focus groups reinforce the inference that many parents are very pleased with how their private school assists their learning-disabled children.

> They [name of private school] got counselors here to help the children with slow disabilities. They have groups...where they, she maybe comes in one or two times out of the week and she sit with the children who have...reading comprehension problems and stuff like that...and...get a chance to really express themselves within a group so that help them come off when they get in a group of other kids in the classroom.[30]

School and Class Size

One explanation for the high satisfaction levels of private school parents is that their children's schools are smaller than public schools. According to parents, the average size of a public school is 513 students, while the average size of the private school is 234 students (see Table 6). Likewise, parents of private school students report that the average class size is about 4 students lower than in the public schools (20, as compared to 24 students). Given the fact that private schools spend less per pupil, it is noteworthy that they can keep their classes small.

Relationships with Teachers

In focus groups, we consistently found parents who were frustrated with the poor relationships they had with teachers and administrators in public schools. For example, one parent described how the principal of her child's public school reacted when she would make inquiries about the school: "The principal would treat you as if you have no reason asking me these questions because you have no need to know."[31] Not surprisingly, then, we found a large gap between private and public school parents when they were asked whether teachers show them respect (see Table 7). Ninety percent of private school parents said that teachers "always" show them respect, while 62 percent of public school parents said the same, a 28-point difference that is statistically significant.

Students were also asked about their relationships with teachers. While there was essentially no private-public difference when youth were asked to respond to the statement "most of my teachers really listen to what I have to say," more public school students reported that they "often feel 'put down' by my teachers." This 24-point difference, however, does not reach the threshold of statistical significance.

One parent reported an experience that perhaps sheds some light on the relationship between teachers and students (and thus, by extension, parents) in public schools.

> The principal there [in her child's public school]....the teachers seem to have an attitude because of the neighborhood that the school is in. They look at the children in that way. I have had teachers say to my son when he was there... "Are you a [derogatory term]?" Just outrageous things they would say to the children and the principal never took any of this seriously. We have had meetings and I have talked to the principal about it and she said, 'I'll deal with it' but I don't expect to see the teacher anymore. Next day she is there and... It is a very nonchalant attitude. Everything is....I just don't understand what their goal is in the school. I don't get it. And I have explained to the teacher that I am a single mother raising three children by myself. I work everyday and I just can't take off and come and sit with them in school. I know my children. I know that they are not hell-raisers. They go to school. They do what they are supposed to do but if there is a complaint I never hear it from any of the teachers. They just have a 'go to hell' kind of attitude about teaching.[32]

Rules

In a finding that seems counter-intuitive, far more public than private school students "agree" or "strongly agree" that the "rules for behavior at my school are strict." The difference is no less than 78 points (93 percent versus 15 percent). Recall that earlier evidence showed that private schools are more orderly than public schools (less fighting, cheating, etc. as reported by parents and fewer disruptions in class as reported by students). This order is apparently not a function of strict behavioral rules. Perhaps strict

rules follow disorderly behavior. And perhaps private schools have a culture of behavioral expectations that doesn't encourage misbehavior in the first place.

Illuminating this finding from our surveys is an interesting anecdote from our focus groups. This participant comments that the faculty of her cousin's private school show a lot of concern for the school's students, and contrasts his experiences in a public and a private school.

> From what I see is going on with my cousin, he was getting suspended every other week at [name of public school] but now it is like the teacher talks to the Mom about him and she compliments him all the time so now he is excelling and is happy go lucky. He don't have to take any more pills. It makes a difference when instead of always talking about how bad they are they can actually point out the good points and talk to the students one-on-one and encourage the students. You can tell the difference.[33]

At least for this student, it did not seem to be the punitive enforcement of rules that improved his behavior.

Racial Integration

One concern often raised is that expanding school choice will ultimately lead to increased ethnic and racial segregation in education.[34] Recently, however, some researchers have found evidence that private schools are actually more, not less, racially integrated than public schools.[35] To examine the consequences of CSF scholarships for the racial integration of its participating students, parents were asked the approximate percentage of students in their child's school who belong to a racial or ethnic minority group. Table 8 displays the results for all CSF applicants regardless of their own race. The results show that private schools are more likely to have a student with a student body of less than 10 percent minority students; they are also less likely to have more than

90 percent minority students. In sum, when speaking of students in general, the private schools attended by CSF recipients are more—not less—racially integrated than public schools. This is likely due to the fact that unlike their public counterparts, private schools do not draw their students from circumscribed geographic areas that for all intents and purposes are racially segregated.

No private-public differences were found when students were asked whether they eat lunch with students of other races, and when they reported how many of their four best friends are of a different race.

Perhaps the most interesting analysis of racial integration is not when all students are considered together, but rather when we focus on African-American students. Table 9 provides parallel results for African-Americans only. Only 23 percent of the black parents with a child in private school were in a school that was over 90 percent minority, whereas 49 percent of black public-school parents had a child in a largely segregated school. Although the difference was quite large, it is not statistically significant. At the very least, there is little sign that the scholarship program is adding to the degree of segregation in school. On the contrary, it seems to be reducing it.

The results for the questions asked of the students support this interpretation. More black private-school students report eating lunch with students of another race than black public-school students (71 percent to 58 percent). They also report having twice as many best friends of a different race (2 of 4 friends versus 1 of 4). Though these results do not clear the bar of statistical significance, they are nonetheless suggestive.

Homework, Classwork, and Television

Both parents and students were asked about the amount and difficulty of the schoolwork students are assigned. Do private schools assign more homework than public schools? The answer is a qualified yes. Table 10 shows that more parents of private school students report that their children do at least one hour of homework each night, although the difference is not substantial (38 percent versus 33 percent) and short of reaching statistical significance. Similarly, 46 percent of private-school students say they spend at least an hour a night on homework, as compared to 32 percent of the public-school students. The private-public gap is bigger for students than parents, but it is still not statistically significant.

In our focus groups, we found many parents who reported that their child's homework load increased—both in quality and quantity—upon moving from a public to a private school. Take, for example, the words of this mother:

Mother: My kids never even had homework in the public schools.

Moderator: So [name of parent] you're saying no homework, public schools...

Mother: No, he didn't even have a concept of how to come home every day and do homework

Moderator: But now...?

Mother: He has homework every day. I look in his bag. His teacher writes notes. They have a homework book where they have to write their homework in a book. I have to sign the book every day.[36]

Another parent describes how she was unprepared for the homework assigned to her first-grader in a private school, and notes what she sees as a connection between homework and academic performance.

> Last year my son was in the first grade and...I thought it was a lot of homework that he had to do. He brought home...six pages...of homework at night and we have to do them and I thought what is this teacher doing? And then, he had to do a book report every week at first grade. I said, "First grade?" But...I was confused at the beginning, but I look at it now, it really helped him because she was constantly giving him all this homework and this year, when he give me his homework to check, he might got one, maybe two difficulties he read fast....he knew it. So it really helped him. It really helped him a lot.[37]

More public school students report that they have difficulty with their schoolwork—more say "class work is hard to learn," "I had trouble keeping up with the work," and "I would do much better if I had more help." While none of the differences meet the appropriate threshold to be considered significant statistically, the consistency of the pattern is suggestive.

The same cannot be said for the impacts of the CSF program on children's television viewing habits. We asked students how often they watch television, given the assumption that more television means less time for homework and other pursuits. No difference is observed when students are asked how much time they spend watching TV or videos or playing video games.

Parental Involvement

Past research into the performance of private schools has suggested that parental involvement is an essential component of their institutional mission and operation. School choice proponents often claim that private schools, dependent on continuing parental support for their long-term financial survival, will make greater efforts to establish close connections with parents. One parent with a unique perspective articulated what the research literature says about the difference in parental involvement between public and private schools.

> That [parental involvement] is the difference between the public school and the private school. I teach in public school. Parent involvement. In private school, they say they want you out, they are there. Public says they want you there, you might have some show up. That is half the battle. Get the parent involved, check the homework, sign this, sign that. Had parent teacher conference yesterday—one parent. The parents just aren't there.[38]

Our data provide only limited support for the claim that having one's child attend a private school leads to greater involvement of parents, although we must stress that our survey was administered after only a single year of participation in CSF. Voluntarism in particular is probably an ethic cultivated over time. Also, applicants to the CSF are already likely to be unusually involved in their children's education, given that applying for the program is itself a mark of commitment.

As displayed in Table 11, there are essentially no differences between private and public school parents when we consider the number of parent-teacher conferences they attended in the last year, their frequency of volunteering in the school, and how often they speak to other parents who have children in the same school.

In our focus groups, many private school parents expressed dissatisfaction, or at least ambivalence, about their school's expectations for volunteering and fundraising. Consider the words of this mother:

> I'm beginning to wonder about the private schools… I don't think they ask you what type of things that you want to do. They basically send letters home and say this is what we do every year…this is what you are required to do. They don't give you an option like with the activity fee that they include in your tuition…[Child's name] has only been there two years, and the first year it was like, you pay $200 at a certain time of the year and this is for some type of activity and every parent is required to pay this$200. OK, it was no problem because it was a fundraiser, but this year they took the $200 and broke it down and added it to your tuition every month.[39]

We did find one measure of home-school communication that is significantly different between private and public school parents. Private school parents report

speaking to their child's teachers more frequently on the phone during the previous year (3 versus 2 times), a difference that could only have occurred by chance one time out of ten. In support of the inference that private schools do a better job of facilitating communication between home and school, we found many parents who were upset at what they perceive as the non-responsiveness of public school faculty. Typical are the words of this mother about her son's public school:

> [H]e would fight everyday. He was coming home, "Mom, guess what? I got in a fight at lunchtime." Everyday. And I told him, "If I hear you say that one more time I am going to ground you. I don't want to hear you say that anymore. You need to stop fighting." But he never got in trouble. The principal never called me. The teacher never made contact with me. Nothing. To me, more or less, they just didn't care. They just let them do what they wanted.[40]

In contrast, another private school parent described how a regular communication channel between parents and teachers allows her to monitor her child's academic progress.

> [T]here is a lot of communication especially on a weekly basis because they bring home their folders with all their work in it and it says, like my daughter at the middle school, it says, that she got three papers that has had a 'D' or an 'F' on it. So that I can come over and say, "Hey, how come we got a 'D' on this, or why wasn't it finished or whatever.' And then the 'D,' 'F' papers the parents have to sign. So this way, you know, on a weekly basis and you have to sign their folder and send it back with them. So on a weekly basis I am getting feedback as to what they did that week, how they did on it. In the public schools I never saw that.[41]

While more private than public students report that their parents know "a lot" about their school (84 percent to 72 percent), more public school students report that they talk to their parents about school "almost every day" (67 percent of public school students compared to 61 percent of those in private schools). Neither of these differences is statistically significant, however. There is no observed difference in the number of friends each student's parents know.

Attitudes Toward Paying Tuition

Parents were asked "whether a school works better when a family pays tuition." As shown in table 12, there is no difference between private and public school parents. Apparently, most of those who applied for a scholarship felt that something was to be gained from attending a private school, even if this meant paying a portion of the fare. Whether or not they won the lottery seems to have had little effect on their opinions one year later.

Plans for Next Year

Some have wondered whether giving a family a choice of school increases the mobility rate among schools. If so, it may decrease the stability of the educational experience. But as reported in Table 13, there were no significant differences between mobility rates in private and public schools. Eighty-two percent of private-school parents reported that their child definitely will return to the same school next year, as compared to 72 percent of public-school parents. The difference is not statistically significant.

Parents whose child will probably not return to the same school were asked the reason why; two reasons stand out as particularly interesting. More public school parents reported that their children were graduating from their schools, a finding almost certainly due to the fact that middle schools are more common in the public than the private sector. Indeed, this difference probably explains most of the overall gap between private and public school return rates. However, roughly 5 percent of private school parents report that their child will not re-enroll because their child's school is too expensive, compared

to essentially no public school parents (a difference that is statistically significant). No private school students were asked to find another school, while a handful of public school students were. This difference, however, is not statistically significant.

Private-school students were less likely to be suspended than public-school students. As can be seen in Table 14, approximately 5 percent of private-school parents reported their child had been suspended, as compared to 12 percent of public-school parents. The difference is not statistically significant, however.

A common obstacle to attending private schools is often thought to be transportation difficulties. Many private schools have no buses, and rarely if ever do they have the extensive transportation system of the public schools, as noted in our focus groups by parents who were offered but declined a scholarship. In one focus group session with parents who were offered but declined a CSF scholarship, a mother commented that "A lot of private schools don't offer transportation," and then went on to describe how her work schedule precluded her from picking her daughter up from school until late in the afternoon. She told us that because she could not find a private school that provides transportation, she had to decline the scholarship. In that same session, another mother echoed her comments by noting that she could only find two schools that "was too far, no transportation. It was kind of a turn off. So I just said I would leave him [in a public school]."[42] Table 15 reports the percentage of parents who are "very satisfied" with the location of their child's school. It turns out that more private school parents express satisfaction with the location of their child's school (50 percent to 31 percent, a statistically significant difference).

This may mean that parents place more value on the neighborhood in which the school is located than the distance from home to school. Suggestive evidence for this interpretation is provided by the fact that there is no difference in the length of time it takes private and public school students to travel to school each morning. In both groups, about half get from home to school in ten minutes or less (Table 15).

Student Results

To this point, data on students have been reported only when they help elaborate information provided primarily by parents. In this section of the report, we turn our attention to questions that were asked exclusively of students. Unfortunately, because of the relatively small size of the student sample, none of the differences discussed in this section clear the bar of statistical significance. But because many of the effects are quite large and potentially important, they are reported as topics for further research.

Educational Expectations

Students tend to have high expectations as to how long they will remain in school. Most students in elementary school and junior high expect to graduate from high school and finish college. Still, if students expect to remain in school beyond college it may indicate that they expect to obtain much out of their educational experience. Table 16 displays the difference in educational expectations between private and public school students. Forty-five percent of those attending private school anticipate finishing college and pursuing their educational studies further, while only 28 percent of public-school students have the same expectations.

Peer Group Relations

Past research into school choice programs has suggested that students might have a difficult time adjusting to a private school after having attended a public school. In D.C., for example, older students reported various adjustment problems.[43] To ascertain whether this was happening nationwide, youth were asked how well the students in their school get along with each other. In addition to this question about students in general, we also asked students whether others "make fun" of them in particular. As reported in Table 17, we found no differences between private and public school students for either of these measures. In other words, we find no evidence that students who move from public to private schools suffer adverse consequences in their peer group relations.

Student Activities

Previous research has found that scholarship programs can boost students' religious service attendance. As reported in Table 18, our data also indicate that the CSF program also increased the frequency of church attendance, though the difference is only 6 percentage points (55 percent versus 49 percent). Paradoxically, private school students report a lower frequency of participation in religious youth groups. For this measure, the gap is 7 points (33 percent compared to 40 percent).

The lower participation of private school students in religious groups is mirrored for other types of activities. Private school students are less likely to be involved in both scouting (Cub Scouts, Brownies) and team sports. In both cases, the differences are

around 10 percentage points, though for neither measure does the private-public gap achieve statistical significance.

Political Tolerance and Knowledge

A major concern of critics of increased school choice involves its potential impact on civil society. Even if students learn to read, write, and calculate more effectively by means of a scholarship program, these gains will be more than offset, it is argued, by the polarization and balkanization of our society that necessarily accompany greater parental choice in education. In the words of commentator Michael Kelley, "public money is shared money, and it is to be used for the furtherance of shared values, in the interests of *e pluribus unum*. Charter schools and their like . . . take from the *pluribus* to destroy the *unum*."[44] Amy Gutmann, the Princeton political theorist, makes much the same argument, if in less colorful prose: "Public, not private, schooling is . . . the primary means by which citizens can morally educate future citizens."[45]

Given the concern that private schools serve to fragment America's sense of civic community, students were asked three questions modeled on a battery of items social scientists have long used to gauge political tolerance:

1. *Some people have views that you oppose very strongly. Do you think these people should be able to come to your school and give a speech? Yes, no, or maybe.*
2. *Should these people be allowed to live in your neighborhood? Yes, no, or maybe.*
3. *Should these people be allowed to run for president? Yes, no, or maybe.*

As reported in Table 19, there is no consistent difference between private and public school students in their levels of political tolerance. On one measure—whether people

with views you oppose should be able to live in your neighborhood—the private school students appear to display more tolerance, as 73 percent agree with the statement compared with 60 percent of public school students. When all of these questions are combined in an index, as is typical with measures like these, there is essentially no difference between private and public school students.

In addition to political tolerance, many political scientists are equally concerned with levels of political knowledge as an indicator of good citizenship. To examine whether there is a difference between private and public school students in how much they know about politics, the survey asked two questions:

> *1. Who is the Vice-President of the United States right now? Is it George Bush, Al Gore, John McCain, Bill Bradley or don't you know?*
>
> *2. Who was the president of the United States during the Civil War? Was it Thomas Jefferson, Abraham Lincoln, Franklin Roosevelt, George Washington or don't you know?*[46]

Admittedly, the second question is really a test of a student's historical knowledge. Including them both means that we can gauge two different ways of learning about politics—current events and history. These are also the only measures in the study that are cognitive in any sense.

As shown in Table 20, we find that private school students score better on both questions. While 63 percent of private school students know the name of the Vice-President, only 48 percent of public school students do. Similarly, 60 percent of students in private schools know that Abraham Lincoln was the president during the Civil War, contrasted with 26 percent of students in public schools. An additive index of the two items also shows the private school advantage in political knowledge.

In sum, these data may indicate that attending private school for one year does not result in a lower degree of political tolerance for students, and may lead to greater political knowledge.

The Selection Process

An important issue in the school-choice debate concerns the composition of those who would leave public schools if scholarships to attend private schools were made generally available. Critics of school choice have argued that choice programs would not offer low-income families a viable choice of schools. In the words of educational sociologist Amy Wells, "White and higher-SES [socioeconomic status] families will no doubt be in a position to take greater advantage of the educational market."[47] The president of the American Federation of Teachers (AFT), Sandra Feldman, has claimed that vouchers for private schools take "money away from inner city schools so a few selected children can get vouchers to attend private schools, while the majority of equally deserving kids, who remain in the public schools, are ignored."[48] But evaluations of a New York City scholarship program, as well as the evaluation of similar programs in Cleveland and San Antonio, indicated that those who made use of a scholarship did not differ sharply from those who were offered a scholarship but did not use it.[49]

Student and Family Characteristics

The data collected in this evaluation are uniquely suited to address whether there are systematic differences between families who did and did not make use of a scholarship when one was offered to them. For this portion of the report, we limit our

analysis to families who were offered a scholarship. Table 21 thus compares two groups we label the "takers"—families who used the scholarship—and "decliners"—families who did not. Because the instrumental variable technique employed in Tables 1-20 is not necessary here, smaller differences between the two groups are statistically significant.

We find that there is no difference whatsoever in the percentage of takers and decliners whose children have learning disabilities. This is a particularly interesting finding given that we have suggestive evidence that private schools do a little better attending to the needs of children who have learning disabilities. Learning disabilities do not appear to keep kids out of private schools, and their parents seem at least as and probably more satisfied with how private schools accommodate the learning disability.

Table 21 also compares takes and decliners in terms of numerous other demographic characteristics. For consistency's sake and because past research suggests that mothers are the primary factor in a child's academic performance, all demographic questions were asked about the mother.[50] The mothers in taker families are slightly more likely to have a college degree and to attend church at least once a week, and are less likely to have a full time job outside of the home. In each case the differences are not dramatic, but they do reach statistical significance. For example, 29 percent of mothers in taker households have a college degree, compared to 22 percent in decliner households.

The average income of taker families is a little lower than decliner families, which is not surprising given that the precise amount of the scholarship offered to a family is based on a sliding income scale.

Mothers in taker households do not differ in age from decliner mothers, although they are more likely to have lived for two or more years at their current residence. There

are also racial and ethnic differences between taker and decliner mothers. More taker mothers are white, while fewer are African-American and Hispanic. Significantly more parents are Catholic, but they are no more likely to be "born-again" Christian. There are also equal percentages of two parent households across the two groups.

To summarize, there is a mixed verdict on the question of whether school choice, and CSF in particular, skims the cream of the educational crop from public schools, as is often alleged. On the one hand, the percentage of students with learning disabilities does not differ between takers and decliners. But on the other hand, the takers appear to come from more socially advantaged families than do the decliners. Mothers of takers are more likely to have a college degree. They are also more likely to have residential stability and to identify themselves racially as white. Takers are also more likely to attend church frequently and to be affiliated with the Catholic Church.

School Selection

The school selection process involves both the family and the school. Families have many different reasons for choosing a particular school for their child to attend. At the same time, the cost of tuition and the number of spaces available at different schools vary widely. Parental responses provide some insight into the way in which the two sides of this process interact to determine the school a child attends.

Some critics of school choice have expressed the concern that under a choice system parents would choose schools for other than academic reasons. They argue that low-income families are more concerned about location, sports programs, or religious instruction than about academic quality per se.[51] For example, the Carnegie Foundation

for the Advancement of Teaching has claimed that "when parents do select another school, academic concerns often are not central to the decision."[52] Similarly, an American Federation of Teachers' report on the Cleveland voucher program suggests that parents sought scholarships not because of "'failing' public schools" but "for religious reasons or because they already had a child attending the same school."[53] Disputing these contentions, supporters of school choice claim that low-income parents, like other parents, place the highest priority on the educational quality of the school.

To examine the question of how CSF affected the reasons parents chose the schools their children are attending, we change our analytical strategy slightly. Here we are interested in knowing the effect of a scholarship *offer* on the criteria parents use to choose their children's schools, whether they went private or not. Instead of a two-stage model, therefore, we use ordinary least squares regression with the scholarship offer as the only independent variable. Because of the change in analytical technique, smaller differences are statistically significant. Table 22 displays the results when parents were asked to list the most important reason for choosing their child's current school. Parents offered a scholarship were more likely to report two reasons: academic quality and religious considerations. Thirty-seven percent of parents offered a scholarship named academic quality as the primary criterion for choosing their child's school, compared to 30 percent of parents who were not offered a scholarship. This difference is statistically significant, as is the difference between the 10 percent of parents offered a scholarship who cited religion as the most important reason for selecting the school their child attends and the 4 percent of parents not offered a scholarship who gave the same response. Thus, while it is true that some parents choose the schools their children will attend on the basis

of religion, it is also true that many more cite academic concerns as their primary concern.

Not surprisingly, parents offered a scholarship were far less likely to report that location was the most important reason for choosing the school their child attends (23 percent versus 31 percent). They were also less likely to report that their child's current school was the "only choice available." The groups did not differ in the percentages who cite discipline, safety, and "other" (unspecified) reasons.

Table 23 continues the analysis begun with Table 22 by reporting the effect of a scholarship offer on admittance into a family's preferred school. We find that 72 percent of families who received an offer were able to enroll their children in the school they wanted, compared to 61 percent of families who did not receive an offer. This difference, though not as large as some might expect, is nonetheless statistically significant.

We then asked those parents whose children were not admitted into their preferred school the reason why. The most commonly cited reason was cost. Sixteen percent of "no offer" families[54] could not afford the cost of the school, compared to 13 percent of "offer" families. In other words, even though CSF scholarships only cover a maximum of 75 percent of tuition and were offered to a low-to-moderate income population, only 13 percent of families offered a scholarship were unable to afford the school of their choice.

One concern about school choice programs raised by both critics and advocates is the limited supply of openings in private schools. Our data show, however, that only 3 percent of families offered a scholarship report that their child was not admitted into their preferred school because there was "no more space available at the school." Indeed, a

greater percentage of families who did not receive an offer (6 percent) cite lack of space as a reason for non-admittance (perhaps a reflection of limited space in magnet or charter public schools).

Another concern raised by critics of school choice is that private schools will use admissions tests to screen out "undesirable" students. However, we have found that less than one percent of families offered a scholarship list an admissions test as the reason their child was not admitted into the school they prefer. The percentage is essentially the same (actually one tenth of a percentage point higher) among families who did not receive an offer. Such a slight difference is not statistically significant.

Families who did and did not receive an offer did not differ in their frequency of citing transportation problems and family mobility as reasons for non-admittance. Not surprisingly, more families who were not offered a scholarship reported that their child "had to attend the neighborhood school."

Religious Affiliation and Tuition

Our report concludes by examining the types of schools in which CSF recipients enroll, and how much they pay in tuition. As reported in Table 24, over half are in Catholic schools, with another 20 percent in non-denominational Christian schools, 7 percent in Baptist schools, 3 percent in Lutheran schools, and 1 percent in Jewish schools. All in all, only 8 percent of CSF students enrolled in non-religious private schools (another 9 percent are in schools classified as "other").

Table 25 displays the range of tuition paid by CSF recipients (this is over and above the scholarship they received). The modal category is $1,000 to $2,000, the

amount paid by 40 percent of scholarship recipients. Twenty-six percent paid between $500 and $1,000, while twenty-five percent paid between $2,000 and $4,000. Only 6 percent paid over $4,000 and 3 percent under $500.

Conclusion

This evaluation is the first of a large-scale national scholarship program enabling low-income parents to send their children to the private school of their choice. Because scholarships were awarded by lottery, PEPG was able to employ the methodology of a randomized field trial. Unlike observational studies, therefore, we are able to attribute any observed differences between the public and private school populations to the effect of switching from the former to the latter. The same methodology has been used to evaluate scholarship programs in individual cities. Questionnaires administered for those evaluations are substantively similar to the one used in this study. However, because those studies were conducted in only three potentially unrepresentative cities, questions have lingered about whether their results can be generalized to the nation as a whole.

It appears that they can. Our telephone survey administered to a probability sample drawn from a master list of CSF applicants has produced results that parallel those from studies conducted in New York City, Washington, D.C., and Dayton, Ohio. Parents of children in private schools are very satisfied with their new schools, both generally and in regards to specific aspects of a child's educational environment—academic rigor, discipline, safety, and the values taught by the school. They are also less likely to encounter problems like cheating, stealing, fighting, and gangs in their child's school. Both the sizes of the school and the average class are smaller, and teachers are

more likely to show parents respect. Students in private schools report far fewer disruptions caused by other students. On the other hand, private schools lack the facilities and programs of most public schools (with the notable exception of individual tutors for students, a resource private schools are more likely to have). And while, by some demographic measures, families using CSF scholarships are advantaged over those who choose not to use them, there is no evidence that private schools are turning away "problem" students.

In sum, we can conclude that the Children's Scholarship Fund has had a measurably positive effect on the educational experiences of its recipients. Parents who have exercised choice over their children's schools report high levels of satisfaction with the schools they have chosen. And based on test score data collected in previous evaluations, it is plausible to speculate that the educational improvements cited by CSF parents will lead to improved academic performance—and thus improved prospects for the future success—of their children.

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[1] The School Choice Scholarships Foundation (SCSF) program was established in New York City prior to the establishment of the CSF program, but, working with SCSF, CSF provided financial support facilitating its second-year evaluation. Currently, CSF has administrative responsibility for the New York scholarship program. The Washington Scholarship Fund and Parents Advancing Choice in Education in Dayton were also in operation prior to the establishment of the CSF program, but CSF has played a major role in sustaining their operations.

For results regarding the impact of the scholarship programs on student test scores across all three cities, see William G. Howell, Patrick J. Wolf, Paul E. Peterson, and

David E. Campbell, "Test-Score Effects of School Vouchers in Dayton, Ohio, New York City, and Washington, D. C.: Evidence from Randomized Field Trials," Paper prepared for the annual meetings of the American Political Science Association, Washington, D. C., September 2000.

For reports from the evaluation of the SCSF program in New York City, see Paul E. Peterson, David E. Myers, Josh Haimson, and William B. Howell, "Initial Findings from the Evaluation of the New York School Choice Scholarships Program," Program on Education Policy and Governance, Kennedy School of Government, Harvard University, November, 1997; Paul E. Peterson, David Myers, and William G. Howell, "An Evaluation of the New York City School Choice Scholarships Program: The First Year," PEPG Report Number 98-12, October 1998; Paul E. Peterson, David E. Myers, William G. Howell, and Daniel P. Mayer, "The Effects of School Choice in New York City," in Susan B. Mayer and Paul E. Peterson, eds., *Earning and Learning: How Schools Matter* (Brookings, 1999), pp. 317-340; Paul E. Peterson and David E. Campbell, eds., *Charters, Vouchers, and Public Education* (Washington, D.C.: Brookings, 2001); David Myers, Paul E. Peterson, Daniel Mayer, Julia Chou, and William P. Howell, "School Choice in New York City after Two Years: An Evaluation of the School Choice Scholarships Program," PEPG Occasional Paper, September 2000; and Paul E. Peterson and William G. Howell, "Exploring Explanations for Ethnic Differences in Voucher Impacts on Student Test Scores," in Tom Loveless and John E. Chubb, *Ending the Test-Score Gap* (Brookings, forthcoming).

For additional reports from the evaluation of the WSF program in Washington, D. C., see Paul E. Peterson, Jay P. Greene, William G. Howell, and William McCready,

"Initial Findings from an Evaluation of School Choice Programs in Washington, D. C. and Dayton, Ohio," PEPG Occasional Paper, October 24, 1998; and Patrick Wolf, William G. Howell and Paul E. Peterson, " School Choice in Washington, DC: An Evaluation after One Year," Paper prepared for the Conference on Charters, Vouchers and Public Education, sponsored by PEPG, March 2000.

For additional reports from the evaluation of Dayton, see William G. Howell and Paul E. Peterson, "School Choice in Dayton, Ohio: An Evaluation After One Year," Paper prepared for the Conference on Charters, Vouchers and Public Education, sponsored by PEPG, March 2000; and Paul E. Peterson, David Campbell and Martin West, "An Evaluation of the Dayton Voucher Program after Two Years" PEPG Occasional Paper, May 2000.

All PEPG Occassional Papers and Reports cited above are available at http://www.ksg.harvard.edu/pepg/index.htm.

[2] This is because the enormous expense involved in testing thousands of students in scores of communities twice (once at the beginning of the school year, once at the end).

[3] Howell, Wolf, Peterson, and Campbell, "Test-Score Effects of School Vouchers."

[4] Jay P. Greene, "School Choice in Charlotte," *Education Matters*, Summer (volume 1, number 2) 2001.

[5] Christopher Jencks and Meridith Phillips, eds., *The Black-White Test Score Gap* (Washington, D. C.: Brookings, 1999).

[6] Alan Krueger, "Experimental Estimates of Education Production Functions." *Quarterly Journal of Economics*, 114 (1999), 497-533.

[7] However, the CSF program was not advertised equally in all parts of the country, scholarships were not available in proportionate numbers everywhere, and application rates were not uniform from all parts of the United States.

[8] No baseline data were collected for the national evaluation of CSF; however, baseline data were collected in the evaluations of the New York, D. C. and Dayton programs, and very few differences in baseline characteristics were statistically significant.

[9] The sampling procedure ensured that samples of test and control groups were similar for geographic areas and that both were proportional to the scholarship offer rate among geographic areas.

[10] In accordance with the recommendations of the American Association for Public Opinion Research, we have calculated an adjusted response rate. See The American Association for Public Opinion Research. 2000. *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys.* Ann Arbor, Michigan: AAPOR. (This document is also available at http://www.aapor.org.)

As detailed in *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*, this response rate uses as its denominator an estimate of the percentage of eligible cases among the unknown cases. We generated that estimate by assuming that the percentage of ineligible households among those we interviewed is the same as the percentage among those we did not interview (43%).

Overall:	45.6%
Treatment:	45.0
Control:	47.0%

Note: in the AAPOR definitions, this is Response Rate 4 (RR4)

For more information about the cooperation and contact rates, feel free to contact PEPG.

[11] For a few demographic measures, there are slight differences between the treatment and control groups that reach or approach statistical significance. These are education level, race, and religious affiliation (% Catholic). Because the response rates for the treatment and control groups are very similar, it is unlikely that these differences are due to anything more than chance (recall that only chance determines if a family receives a scholarship). To account for these slight differences, we have employed standard post-stratification weighting. We are able to construct weights so that the demographic composition of the treatment and control groups match. An example best illustrates our method.

> 41.7% of the treatment group report that the mother in the household has had "some college," compared to 45.3% of the control group. We thus simply calculate 45.3/41.7 to generate the weight for this variable. We continue this procedure for race and religious affiliation as well, and generate a final weight by multiplying them all together.

Note that use of these weights make no substantive difference for the estimates we generate. See the Appendix for a table with all of the demographic comparisons between the treatment and control groups.

[12] Note that when we run our two-stage model with a host of standard control variables—mother's education, mother's age, length of residence, whether the mother is employed fulltime, whether the mother was born in the United States, mother's race, mother's marital status, Catholic religious affiliation, whether the mother is a "born-again" Christian, frequency of religious service attendance, and family income—the results are essentially unchanged.

[13] See Joshua D. Angrist, Guido W. Imbens, and Donald B. Rubin, "Identification of Causal Effects using Instrumental Variables," *Journal of the American Statistical Association*, 91 (1996), 444-462 for a discussion of the technique. See Krueger, "Experimental Estimates" for an application to an educational intervention.

[14] While in most cases parents brought children to the testing sessions, occasionally other family members or friends would instead.

[15] Jay Greene, "The Hidden Research Consensus Supporting School Choice" in Paul E. Peterson and David E. Campbell, *Charters, Vouchers, and Public Education* (Washington, D.C.: Brookings, 2001).

[16] A summary of findings from earlier studies is available in Paul E. Peterson, "School Choice: A Report Card," in Peterson and Hassel, *Learning from School Choice* (Washington, D.C.: Brookings, 1998), p. 18. Mark Schneider, Paul Teske, Melissa Marschall, and Christine Roch, "Tiebout, School Choice, Allocative and Productive Efficiency," paper prepared for annual meetings of the American Political Science Association, 1998, find higher levels of parental satisfaction within New York City public schools, when parents are given a choice of school.

[17] Focus group session, Washington, D.C., April 15, 2000.

[18] Focus group session, Washington, D.C., March 25, 2000.

[19] Focus group session, Dayton, Ohio, March 18, 2000.

[20] Focus group session, Dayton, Ohio, March 18, 2000.

[21] To adjust for possible question-ordering effects, this list was randomized for each interview, a practice followed for each similar list in the survey.

[22] At this point, the reader is reminded that these figures are generated from the two-stage estimates described above; the estimate may not mean that fighting is never a serious problem in a private school, but it does indicate large differences in the prevalence of fighting in public and private schools.

[23] Focus group session, Washington, D.C., April 1, 2000.

[24] Focus group session, Washington, D.C., April 1, 2000. Also, note that this parent refers to a child in kindergarten. CSF scholarships could be used for kindergarten tuition, but our telephone survey only included parents of children in grades 1 through 8.

[25] U.S. Department of Education, National Center for Education Statistics, *Digest of Education Statistics* (Washington, D.C.: National Center for Education Statistics, 1999), table 62, table 170. Since the tuition figures are from 1993-94, that is the year chosen for the public school expenditures as well (in 1998-99 dollars).

[26] Digest of Education Statistics, 1999, table 74.

[27] Focus group session, Washington, D.C., April 15, 2000.

[28] Focus group session, Washington, D.C., April 8, 2000.

[29] Laura F. Rothstein, "School Choice and Students with Disabilities," in Stephen D. Sugarman and Frank R. Kemerer, eds., *School Choice and Social Controversy*, (Washington, D. C.: Brookings, 1999), p. 357.

[30] Focus group session, Washington, D.C., March 4, 2000.

[31] Focus group session, Washington, D.C., March 4, 2000.

[32] Focus group session, Washington, D.C., April 1, 2000.

[33] Focus group session, Dayton, Ohio, March 18, 2000.

[34] Michael Kelly, "Dangerous Minds," *New Republic*, December 20, 1996.

[35] Jay P. Greene and Nicole Mellow, "Integration Where it Counts," *Texas Education Review*, Volume 1, Number 1, Spring 2000; Michael Heise and Thomas Nechyba, "School Finance Reform: A Case for Vouchers," Center for Civic Innovation, The Manhattan Institute for Public Policy Research, Civic Report, Number 9, October, 1999; Howard Fuller and George Mitchell, "The Impact of School Choice on Racial and Ethnic Enrollment in Milwaukee Private Schools," Marquette University, Current Education Issues, Number 99-5, December 1999. See also Howard Fuller and George Mitchell, The Impact of School Choice on Integration in Milwaukee Private Schools," Marquette University, Current Education Issues, Number 2000-2, June 2000.

[36] Focus group session, Washington, D.C., March 4, 2000.

[37] Focus group session, Washington, D.C., March 4, 2000

[38] Focus group session, Dayton, Ohio, April 1, 2000.

[39] Focus group session, Washington, D.C., April 8, 2000.

[40] Focus group session, Dayton, Ohio, April 1, 2000.

[41] Focus group session, Dayton, Ohio, April 1, 2000.

[42] Focus group session, Dayton, Ohio, March 18, 2000.

[43] Patrick Wolf,. William G. Howell and Paul E. Peterson, " School Choice in Washington, DC: An Evaluation after One Year."

[44] Michael Kelly, "Dangerous Minds," *New Republic,* December 20, 1996.

[45] Amy Gutmann, *Democratic Education* (Princeton, N. J.: Princeton University Press, 1987), p. 70.

[46] The order of the response options in both questions was randomized.

[47] Amy Stuart Wells, "African-American Students' View of School Choice," in Bruce Fuller, Richard F. Elmore, and Gary Orfield, eds., *Who Chooses? Who Loses? Culture, Institutions, and the Unequal Effects of School Choice* (New York: Teachers College Press, 1996), p. 47.

[48] Sandra Feldman, "Let's Tell the Truth," *New York Times*, November 2, 1997, p. 7 (Advertisement).

[49] Paul E. Peterson, David Myers, Josh Haimson, and William G. Howell, "Initial Findings from the Evaluation of the New York School Choice Scholarships Program," Occasional Paper, Harvard University, Program on Education Policy and Governance, November 1997; Jay P. Greene, William G. Howell, and Paul E. Peterson, "Lessons from the Cleveland Scholarship Program," in Paul E. Peterson and Bryan C. Hassel., eds., *Learning from School Choice* (Washington, D. C.: Brookings,1998), pp. 357-94; Paul E. Peterson, David Myers and William G. Howell, "An Evaluation of the Horizon Scholarship Program in the Edgewood Independent School District, San Antonio, Texas: The First Year," Occasional Paper, Program on Education Policy and Governance, Harvard University, Cambridge MA, October, 1999.

[50] More specifically, the questions were asked about the mother or female guardian. Only in those few cases where there was no female guardian did the questions pertain to the father or male guardian.

[51] Dan Murphy, F. Howard Nelson and Bella Rosenberg, "The Cleveland Voucher Program: Who Chooses? Who Gets Chosen? Who Pays?" (New York: American Federation of Teachers, 1997), p. 10.

[52] Carnegie Foundation for the Advancement of Teaching, *School Choice: A Special Report* Princeton, New Jersey: Carnegie Foundation for the Advancement of Teaching, 1992), p. 13.

[53] Nicholas Lemann, "A False Panacea," *Atlantic* (January 1991), p. 104, as quoted in Abigail Thernstrom, *School Choice in Massachusetts* (Boston: Pioneer Institute for Public Policy Research, 1991), p. 40.

[54] That is, 16% of all families who were not offered a scholarship, not of just those families whose child was not admitted into the school they preferred.

Table 1-- The Overall Impact in Three Cities of Switching to a Private School on Test Score Performances

	Year 1 (Percentiles)	Year 2 (Percentiles)
African Americans		
Overall	3.3	6.3**
Math	5.5*	6.2*
Reading	1.3	6.3**
All Other Ethnic Groups		
Overall	0.2	-1.0
Math	-0.2	-1.2
Reading	0.4	-0.8

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$; two-tailed test.

Figures represent the average impact of switching to a private school on test scores in New York, Dayton, and D.C.. Averages are based upon effects observed in the three cities weighted by the inverse of the standard errors of the point estimates. For African Americans, the unweighted average effects after one year are 2.7 overall, 4.8 in math, and 0.6 in reading; after two years, the unweighted average effect sizes are 6.6 overall, 6.5 in math, and 6.8 in reading.

Table 2 – Parent and Student Grades for School

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Parents who gave school an "A"	71.5%	16.2%	55.3***
Average grade parents give their school[a]	A- (3.8)	C+ (2.5)	1.3***
(N)			2365
Students who gave school an "A"	51.6%	37.9%	13.7
Average grade students give their school	B (3.2)	B (3.1)	0.1
Students who "like school a lot"	27.5%	43.2%	-15.7
(N)			868-871

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$, *** = significant at $p < 0.01$; two-tailed test.

[a] Average grade calculated using a standard GPA scale (A=4.0, B=3.0, C=2.0, D=1.0, F=0).

Table 3 – Satisfaction with School

	Effect of Going Private		
	Private	**Public**	**Impact**
	(1)	(2)	(3)
"Very satisfied" with:			
Academic Quality	67.7%	23.4%	44.3***
Safety	70.5	19.9	50.6***
Discipline	57.5	21.5	36.0***
Teaching Values	68.9	24.5	44.4***
Parents who feel "very proud" of child's school	69.5%	24.5%	45.0***
(N)			2354-2366
Students who strongly agree "students are proud" to attend their school	55.0%	34.6%	19.4
(N)			857

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.

Table 4 – School Discipline

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Parents rating the following problem as "somewhat" or "very serious":			
Fighting	0%	47.3%	-47.3***
Cheating	0	23.8	-23.8***
Stealing	1.3	33.1	-31.8***
Gangs	2.8	15.4	-12.6*
Racial Conflict	2.7	21.7	-19.0**
Guns	0	13.7	-13.7**
Drugs	5.4	14.8	-9.4
(N)			2086-2325
Students who "strongly agree" with the following statements about their school:			
"Other students often disrupt class."	7.8%	56.8%	-49.0**
"Some teachers ignore cheating when they see it."	16.8	7.1	9.7
"I do not feel safe at school"	0	17.3	-17.3
Average number of student's four best friends who "get in trouble with their teachers"	1.00	1.04	0.04
(N)			859-865

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$, *** = significant at $p < 0.01$; two-tailed test.

Table 5 – School Facilities and Programs

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Percents reporting the following resources at their child's school:			
Nurse's Office	66.1%	88.9%	-22.8***
Cafeteria	79.0	93.1	-14.1**
Special programs for advanced learners	58.7	70.9	-12.2
Special programs for students with learning problems	57.9	87.6	-29.7***
Guidance counselor	58.7	70.9	-12.2
Music program	83.2	85.7	-2.5
Individual tutors	78.4	48.6	29.8***
After-school program	84.4	71.5	12.9
(N)			1991-2352
Of parents of students with learning disabilities: Child's school attends to his/her particular learning needs "very well"	73.0%	30.1%	42.9
(N)			314

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$, *** = significant at $p < 0.01$; two-tailed test.

Table 6 – Size of School and Class

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Average size of school (as reported by parents)[a]	234	513	-279***
Average class size (as reported by parents)[b]	19.5	23.6	-4.1***
(N)			1949

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.

[a] Average size of school estimated with each category coded at its midpoint. Responses in the largest category (over 600) were assigned a value of 675.
[b] Average class size estimated with each category coded at its midpoint. Responses in the highest category (over 40) were assigned a value of 43.

Table 7 – Relationships with Teachers

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Parents reporting teachers "always" show them respect	90.0%	61.7%	28.3***
(N)			2330
Students who "agree" or "strongly agree" with the following statements:			
"Most of my teachers really listen to what I have to say."	79.8%	85.8%	-6.0
"In class, I often feel 'put down' by my teachers."	3.3	27.6	-24.3
"Rules for behavior at my school are strict."	14.6	93.0	-78.4***
(N)			859-865

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.

Table 8 – Ethnic Integration
(All Respondents)

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Students attending schools with the following percentage of minorities (as reported by parents):			
Under 10%	44.2%	23.1%	21.1**
10% to 50%	27.4	17.6	9.8
50% to 90%	14.1	25.6	-11.5
Over 90%	14.5	33.8	-19.3*
Total	100.0%	100.0%	
(N)			2268
Students who report eating lunch with students of other races "all of the time" or "most of the time"	60.7%	58.2%	2.5
Average number of four best friends who are of a different race (as reported by students)	1.15	1.26	.11
(N)			822-859

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.

Table 9 – Ethnic Integration (African-Americans Only)

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Students attending schools with the following percentage of minorities (as reported by parents):			
Under 10%	18.5%	16.6%	1.9
10% to 50%	22.9	14.0	8.9
50% to 90%	35.3	20.1	15.2
Over 90%	23.3	49.3	-26.0
Total	100.0%	100.0%	
(N)			1112
Students who report eating lunch with students of other races "all of the time" or "most of the time"	71.0%	57.7%	13.3
Average number of four best friends who are of a different race (as reported by students)	2.14	.94	1.20
(N)			419-429

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$, *** = significant at $p < 0.01$; two-tailed test.

Table 10 – Homework, Classwork, and Television

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Parents reporting child does "one to two hours" or more of homework each night:	38.6%	32.9%	5.7
(N)			2345
Students reporting they do "one to two hours" or more of homework each night	45.9%	32.2%	13.7
Students who agree with the following statements about their work:			
"Class work is hard to learn"	5.8%	16.1%	10.3
"I had trouble keeping up with the work"	19.0	40.8	21.8
"I would do much better if I had more help"	40.4	52.0	-11.6
Average hours each day spent watching TV or videos or playing video games[a]	2.4	2.5	-0.1
(N)			863-868

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$, *** = significant at $p < 0.01$; two-tailed test.

[a]Estimated with each category coded at its midpoint. Responses in the highest category (over 5) were assigned a value of 5.5.

Table 11 – Parental Involvement

	Effect of Going Private		
	Private	**Public**	**Impact**
	(1)	**(2)**	**(3)**
Number of parent-teacher conferences attended in last year	2.7	3.2	-.5
Volunteered at least one hour in the child's school in the past month	49.1%	46.7%	2.4
Talks with other parents of children in the same school "often" or "very often"	67.7%	67.5%	0.2
Number of times spoken with teacher on phone in the last year	3.2	2.4	0.8*
(N)			2352-2354
Students reporting that:			
Their parents "know a lot" about their school	83.8%	71.8%	12.0
They talk to their parents about school "almost every day"	60.9	66.8	-5.9
Average number of student's four best friends his or her parent knows	2.9	3.0	0.1
(N)			860-865

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$, *** = significant at $p < 0.01$; two-tailed test.

Table 12 – Does Paying Tuition Make A School Work Better?

	Effect of Going Private		
	Private	**Public**	**Impact**
	(1)	(2)	(3)
"School works better when a family pays tuition"[a]	73.2%	74.4%	-1.2
(N)			1607

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$, *** = significant at $p < 0.01$; two-tailed test.

[a] The other choice was "a school works better when all the costs are paid for by taxes." Note that 28% of respondents reported that they did not know the answer to this question.

Table 13 – Returning to Same School Next Year

	Effect of Going Private		
	Private	**Public**	**Impact**
	(1)	(2)	(3)
Students who definitely will return to the same school next year[a]	81.9%	72.4%	9.5
Reasons for not returning:			
"Graduating"	3.0	16.4	-13.4*
"Quality of school is not acceptable"	4.1	5.0	-0.9
"School is too expensive"	4.9	0.7	4.2**
"Child asked not to return"	0	1.1	-1.1
"Some other reason"	8.0	5.9	2.1
(N)			2209

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$, *** = significant at $p < 0.01$; two-tailed test.

[a] Columns do not sum to 100% because of statistical adjustment.

Table 14 – Suspension Rates

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Students suspended (as reported by parents)	5.1%	11.6%	-6.5
(N)			2358

* = difference significant at p < 0.1, ** = significant at p < 0.05, *** = significant at p < 0.01; two-tailed test.

Table 15 – School Location

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Parents "very satisfied" with the location of their child's school	49.5%	31.2%	18.3*
Students who get from home to school each morning in ten minutes or less (as reported by parents)	49.7%	51.4%	-1.7
(N)			2340-2356

* = difference significant at p < 0.1, ** = significant at p < 0.05, *** = significant at p < 0.01; two-tailed test.

Table 16 – Educational Expectations

	Effect of Going Private		
	Private (1)	Public (2)	Impact (3)
Students who expect to continue education past college	44.5%	28.1%	16.4
(N)			846

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.

Table 17 – Peer Group Relations

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Students who "agree" or "strongly agree" that in their school:			
"Students get along well with others"	59.0%	62.9%	-3.9
"Other students make fun of me"	24.1	25.8	-1.7
(N)			871

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.

Table 18 – Student Activities

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Students who report doing the following activities "a lot":			
"Attend church or religious services outside of school"	54.7%	48.7%	6.0
"Participate in church or religious youth groups"	32.7	39.9	-7.2
"Participate in scouting (Cub Scouts, Brownies)"	4.3	14.7	-10.4
"Play team sports (like Little League)"	34.2	45.2	11.0
(N)			867

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.

Table 19 – Political Tolerance

	Effect of Going Private		
	Private	Public	Impact
	(1)	(2)	(3)
Students who think those with opposing views should be allowed to:			
"Come to your school and give a speech"	50.1%	49.1%	1.0
"Live in your neighborhood"	73.1	60.2	12.9
"Run for president"	49.0	45.4	3.6
Index of Political Tolerance[a]	1.8	1.6	0.2
(N)			861

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.

[a]The index represents the additive score of the three tolerance items.

Table 20 – Political Knowledge

	Effect of Going Private		
	Private	*Public*	*Impact*
	(1)	(2)	(3)
Students answering correctly			
Name of Vice President	63.2%	48.4%	14.8
Name of President during Civil War	59.5	25.9	33.6
Index of Political Knowledge[a]	0.93	0.74	0.19
(N)			871

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$, *** = significant at $p < 0.01$; two-tailed test.

[a]The index represents the additive score of the two knowledge items.

Table 21 - Demographic Characteristics

	Takers	Decliners	Difference
	(1)	(2)	(3)
Students with learning disabilities	13.4%	13.4%	0
Mothers who:			
Have a college degree	29.4%	22.4%	7.0***
Attend church at least once a week	74.2%	64.4%	9.8***
Work full time	50.3%	59.6%	-9.3***
Average household income	$30,700	$33,000	-2,300**
Mother's age	36.8	37.2	-0.4
Mother lived at current residence two years or more	85.3%	79.4%	6.9***
Mother's Ethnicity:			
Percent White	30.1%	24.8%	5.3***
Percent African-American	38.0%	51.9%	-13.9***
Percent Hispanic	13.5%	17.4%	-3.9*
Two parent households	53.7%	51.8%	1.9
Mother's Religious Affiliation:			
Catholic	31.3%	24.1%	7.2***
"Born Again" Christian	38.2%	40.5%	-2.3
(N)	435-464	1035-1116	

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$, *** = significant at $p < 0.01$; twotailed test.

Table 22 – School Selection

	Effect of Scholarship Offer		
	Offer	No Offer	Impact
	(1)	(2)	(3)
Single most important reason why parent chose school:			
Academic quality	36.5%	30.4%	6.1***
Location	23.1	30.5	-7.5***
Only choice	18.9	24.2	-5.3***
Religion	9.5	3.8	5.7***
Discipline	3.0	2.8	0.2
Safety	3.3	3.3	0
Other	5.7	5.0	0.7
Total	100.0%	100.0%	
(N)	1574	786	

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.

Table 23 – Attending a Preferred School

	Effect of Scholarship Offer		
	Offer	No Offer	Offer
	(1)	(2)	(3)
Gained admission to their preferred school	71.7%	60.8	10.9***
Reasons why child did not gain admission to preferred school :			
Could not afford the cost of school	12.5	16.3	-3.8***
Admissions test	0.7	0.8	-0.1
No more space available at the school	3.2	5.7	-2.5***
Had to attend neighborhood school	3.8	6.5	-2.7***
Transportation problems	2.1	2.6	-0.5
Family moved away from school	0.6	0.8	-0.2
Other reason	5.3	6.4	-1.1
Total	100.0	100.0%	
(N)	1554-1557	769-772	

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.

Table 24 – Religious Affiliation of Recipients' Schools

	Takers
	(1)
Catholic	52.8%
Christian (non-denominational)	19.9
Non-religious	7.9
Baptist	6.5
Lutheran	3.2
Jewish	0.9
"Other"	8.8
Total	100.0%
(N)	432

Table 25—Tuition Paid[a]

	Takers
	(1)
Less than $500	3.2%
$500 to less than $1,000	25.5
$ 1,000 to less than $2,000	39.8
$2,000 to less than $4,000	25.2
$4,000 or more	6.3
Total	100.0%
(N)	412

[a] The precise wording of the question is "How much each year does your family pay for your child's school? Less than $500; $500 to less than $1,000; $1,000 to less than $2,000; $2,000 to less than $4,000; or $4,000 or more?"

Appendix

Table A: Demographic Comparisons Between Treatment and Control Groups

	Control	Treatment
	(1)	(2)
College degree (%)	21.7	24.4
Some college (%)	45.3	41.7*
Age	37.1	37.1
Lived in current residence 2 or more years	80.7	81.1
Two parent household	52.4	52.3
Work full time (%)	57.6	56.9
Born in USA (%)	82.0	82.5
White (%)	24.8	30.1***
Black (%)	51.6	47.9*
Hispanic (%)	17.2	16.3
Married (%)	54.2	54.9
Catholic (%)	23.4	26.2
Born again (%)	39.7	39.8
Attend church once a week or more (%)	64.9	67.3
Household Income	31,900	32,400
(N)	728-788	1470-1580

* = difference significant at $p < 0.1$, ** = significant at $p < 0.05$,
*** = significant at $p < 0.01$; two-tailed test.